CLIMATE NEWS

From Sheldon Whitehouse, Barbara Boxer, and Jeff Merkley
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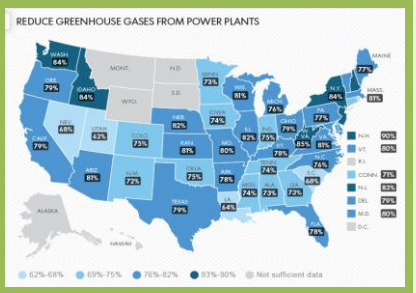
Americans Back GHG Cuts from Power Plants



The vast majority of Americans in each of 40-plus states surveyed say climate change is real, serious, and man-made, and the concerns are slightly higher in coastal or drought-stricken areas, according to a recent analysis by Stanford University's Jon Krosnick. At least 75 percent of U.S. adults say climate change has been happening, but the study found that 84 percent or more took that view in states recently hit by drought—Arizona, New Mexico, Oklahoma, and Texas—or vulnerable to sea-level rise: Delaware, New Jersey, New York, Maine, Massachusetts, and Rhode Island. The research also found broad public agreement on the cause and the remedies. A majority say past warming has been caused largely by human activities—ranging from a low of 65 percent in Utah to a high of 92 percent in Rhode Island. Most also support curbs on greenhouse gas emissions from power plants—from 62 percent in Utah to 90 percent in New Hampshire. Krosnick found that most Americans support tax breaks to produce renewable energy and reduce air pollution from coal. *(USA Today)*

WMO Says 2013 on Course to Rank Among Ten Warmest Years

According to the World Meteorological Organization (WMO), this year is the seventh warmest since records began in 1850. The first nine months of the year tied with the same period of 2003 as seventh warmest, with average global land and ocean surface temperatures at 0.48°C (0.86°F) above the 1961-1990 average. The WMO said 2013 is likely to end among the top 10 warmest years since records began in 1850. The warmest year on record is 2010, ahead of 2005 and 1998. "This year once again continues the underlying, long-term trend," towards higher temperatures caused by climate change that are causing more heatwaves and heavy rainfall events, said WMO Secretary-General Michel Jarraud. He added that more greenhouse gases (GHGs) in the atmosphere means a warmer future, and more extreme weather is inevitable. In September, the UN Intergovernmental Panel on Climate Change (IPCC) raised the probability that manmade GHG emissions, largely from burning fossil fuels, were the main cause of warming since 1950. The probability rose to at least 95 percent, up from 90 in the 2007 IPCC report. *(Reuters)*

South Florida Faces Ominous Prospects from Rising Waters

Long battered by hurricanes and prone to flooding from intense thunderstorms, Florida is the U.S. state most vulnerable to sea-level rise. In the most dire predictions, South Florida's delicate barrier islands, coastal communities, and captivating beaches will be lost in as few as 100 years. The Everglades, the river of grass that gives the region its fresh water, will one day be contaminated by salt water and the Florida Keys will be mostly submerged. "We're going to get four or five or six feet of water, or more, by the end of the century. You have to wake up to the reality of what's coming," said Dr. Harold R. Wanless, chair of the geological sciences department at the University of Miami. Concern about rising seas is also stirring in local governments along the southeastern coast of Florida. The four counties there—Broward, Miami-Dade, Monroe, and Palm Beach, which have a combined population of 5.6 million people—have formed an alliance to figure out solutions. Much of Florida's 1,197-mile coastline is only a few feet above the current sea level, and billions of dollars worth of buildings, roads, schools, and other infrastructure lies on highly porous limestone that leaches water like a sponge. *(NYT)*

Climate Change is Shifting Global Rainfall Trends

Global precipitation patterns are being moved in new directions by climate change, recent research has found. The study is the first to find the signal of climate change in global precipitation shifts across land and ocean. "It's worth saying that this is another grain of sand on that vast pile of evidence that climate change is real and is occurring," said co-author Kate Marvel of Lawrence Livermore National Laboratory. Models predict the addition of heat-trapping gases in the atmosphere will shift precipitation in two main ways. The first is a strengthening of existing precipitation patterns, commonly called "wet get wetter, dry get drier." The second is a change in storm tracks, which should move toward the poles as atmospheric circulation changes. Looking for both increased rainfall in wet areas and a shift in storm tracks away from the equator helped the researchers separate the signal of climate change from the noise of natural variability. "If you find wet get wetter, dry get drier, occurring increasingly in tandem with poleward expansion, there's just almost no way that can happen naturally," Marvel said. *(ClimateWire/pnas.1314382110)*